

Listing of Claims:

Claims 1-25 (Cancelled)

Claim 26 (Withdrawn): A method of identifying compounds to be tested for treating adverse affects associated with a disruption of GABP's metabolic pathway, comprising:

a) providing an assay capable of determining compounds that perform a function selected from a group consisting of:

- i) increases concentration of a GABP stimulator,
- ii) decreases concentration of a GABP suppressor,
- iii) increases effectiveness of a GABP stimulator, and
- iv) an agent that decreases effectiveness of a GABP suppressor; and

b) running sample compounds through said assay and identifying any compound that performs one of said functions as a compound to be tested.

Claim 27 (Withdrawn): The method of claim 26 wherein said adverse affect associated with microcompetition is cancer and said patient is being treated for cancer.

Claim 28 (Withdrawn): The method of claim 26 wherein said adverse affect associated with microcompetition is atherosclerosis and said patient is being treated for atherosclerosis.

Claim 29 (Withdrawn): The method of claim 26 wherein said adverse affect associated with microcompetition is osteoarthritis and said patient is being treated for osteoarthritis.

Claim 30 (Withdrawn): The method of claim 26 wherein said adverse affect associated with microcompetition is obesity; and said patient is being treated for obesity.

Claim 31 (Withdrawn): A method of identifying compounds to be tested for treating adverse affects associated with a disruption of GABP's metabolic pathway, comprising:

a) providing an assay capable of determining compounds that perform a function selected from a group consisting of:

- i) increases concentration of GABP $\alpha$ ,
- ii) increases concentration of GABP $\beta$ ,
- iii) decreases concentration of GABP $\gamma$ ,
- iv) increases phosphorylation of GABP,
- v) increases affinity between GABP and p300/CBP,
- vi) stimulates binding of GABP to DNA, and
- vii) increases concentration of p300/CBP; and

b) running sample compounds through said assay and identifying any compound that performs one of said functions as a compound to be tested.

Claim 32 (Withdrawn): The method of claim 31 wherein said adverse affect associated with microcompetition is cancer and said patient is being treated for cancer.

Claim 33 (Withdrawn): The method of claim 31 wherein said adverse affect associated with microcompetition is atherosclerosis and said patient is being treated fm atherosclerosis.

Claim 34 (Withdrawn): The method of claim 31 wherein said adverse affect associated with micro competition is osteoarthritis and said patient is being treated for osteoarthritis.

Claim 35 (Withdrawn): The method of claim 31 wherein said adverse affect associated with microcompetition is obesity and said patient is being treated for obesity.


Claim 36 (Withdrawn): A method of identifying compounds to be tested for treating adverse affects associated with a disruption of GABP's metabolic pathway, comprising:

a) providing an assay capable of determining compounds that perform a function selected from a group consisting of:

- i) increases concentration of a GABP kinase,
- ii) stimulates phosphorylation of a GABP kinase, and
- iii) increases affinity between GABP and GABP kinase; and

b) running sample compounds through said assay and identifying any compound that performs one of said functions as a compound to be tested.

Claim 37 (Withdrawn): The method of claim 36 wherein said adverse affect associated with microcompetition is cancer and said patient is being treated for cancer.

 Claim 38 (Withdrawn): The method of claim 36 wherein said adverse affect associated with microcompetition is atherosclerosis and said patient is being treated for atherosclerosis.

Claim 39 (Withdrawn): The method of claim 36 wherein said adverse affect associated with microcompetition is osteoarthritis and said patient is being treated for osteoarthritis.

Claim 40 (Withdrawn): The method of claim 36 wherein said adverse affect associated with microcompetition is obesity and said patient is being treated for obesity.

Claim 41 (Withdrawn): A method of identifying compounds to be tested for treating adverse affects associated with a disruption of (GABP's metabolic pathway, comprising:

a) providing an assay capable of determining compounds that decrease oxidative effect on GABP; and

b) running sample compounds through said assay and identifying any compound that performs one of said functions as a compound to be tested.

Claim 42 (Withdrawn): The method of claim 41 wherein said adverse affect associated with microcompetition is cancer and said patient is being treated for cancer.

Claim 43 (Withdrawn): The method of claim 41 wherein said adverse affect associated with microcompetition is atherosclerosis and said patient is being treated for atherosclerosis.

Claim 44 (Withdrawn): The method of claim 41 wherein said adverse affect associated with microcompetition is osteoarthritis and said patient is being treated for osteoarthritis.

Claim 45 (Withdrawn): The method of claim 41 wherein said adverse affect associated with microcompetition is obesity and said patient is being treated for obesity.

Claims 46-50 (Cancelled)

Claim 51 (Previously added): A method for evaluating an effectiveness of a compound for use in modulating a disease, the method comprising:

- a) selecting a compound of interest;
- b) combining the compound with a system, wherein the system includes a known copy number of N-boxes;
- c) assaying the copy number of the N-boxes in the system after the combination; and
- d) determining whether the compound modifies the copy number.

Claim 52 (Previously added) The method of claim 51, wherein the system includes cells, and the N-boxes are foreign to the cells.

Claim 53 (Previously added): The method of claim 52, wherein the N-boxes are viral N-boxes.

Claim 54 (Previously added): The method of claims 51, wherein the assay identifies whether the compound modifies the copy number of active N-boxes.

Claim 55 (Previously added): The method of claims 51, wherein the assay identifies whether the compound modifies the copy number of N-boxes bound by a transcription complex.

Claim 56 (Previously added): The methods of claims 51, wherein the disease is cancer.

Claim 57 (Previously added): The methods of claims 51, wherein the disease is atherosclerosis.

Claim 58 (Previously added): The methods of claims 51, wherein the disease is osteoarthritis.

Claim 59 (Previously added): The methods of claims 51, wherein the disease is obesity.

Claim 60 (Previously added): A method for evaluating the ability of a compound to affect gene

expression, the method comprising the steps of:

- a) selecting a compound of interest;
- b) combining the compound with a system, wherein the system includes a known copy number of N-boxes;
- c) assaying the copy number of the N-boxes in the system after the combination; and
- d) determining whether the compound modifies the copy number.

*61 Cont.*  
Claim 61 (Previously added): The method of claim 60, wherein the system includes cells, and the N-boxes are foreign to the cells.

Claim 62 (Previously added): The method of claim 61, wherein the N-boxes are viral N-boxes.

Claim 63 (Previously added): The methods of claims 60, wherein the assay identifies whether the compound modifies the copy number of active N-boxes in the system.

Claim 64 (Previously added): The methods of claims 60, wherein the assay identifies whether the compound modifies the copy number of N-boxes bound by a transcription complex.